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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,836	03/08/2004	Hwei-Ling Yau	87082CPK	1251

7590

06/13/2006

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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/795,836	YAU ET AL.	
	Examiner	Art Unit	
	Betelhem Shewareged	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/8/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-25, drawn to recording element, classified in class 428, subclass 32.1.
 - II. Claims 26-27, drawn to method of printing, classified in class 347, subclass 105.
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case product as claimed can be used in a materially different process of using that product, (i.e., the product can be used as a wall paper). Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Chris P. Konkol on 05/31/2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 26-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-10, 13, 14, 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yau et al. (US 2004/0090512 A1) in view of Landry-Coltrain et al. (US 2003/0138608 A1).

8. Yau discloses an ink jet recording element comprising a support having thereon a fusible, porous, image-receiving layer comprising at least two types of hydrophobic polymer particles having different glass transition temperatures, the first type of hydrophobic polymer particles having a T_g higher than about 60 degree C that is monodisperse and the second type of hydrophobic polymer particles having a T_g lower than about 25 degree C [0014]. The first particles have an average particle size of from about 0.2µm to about 2µm, and have the claimed particle size distribution ([0031] and [0032]). The weight ratio of the first particles to the second particles is from about 10:1 to about 2.5:1 [0032]. The image receiving layer is coated in an amount of 10-60g/m², and has a pore volume of about 5 to about 50 ml/m² [0037]. Crosslinking monomer is

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used in forming the image receiving layer [0027], and the image receiving layer may comprise UV absorbers [0035]. The substrate comprises paper or polymer film [0038]. The ink jet recording element further comprises a base layer [0039]. Yau does not teach that the base layer comprises gelatin as recited in the claimed invention.

9. Landry-Coltrain teaches an ink jet recording element comprising a support and at least two ink receiving layers (abstract and [0070]). The recording element further comprises a base layer having a highly swellable polymers such as gelatin [0068]. With respect to the swelling amount, it is elementary that the mere recitation of newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. *In re swinehart et al.*, 169 USPQ 226 at 229. Since the Landry-Coltrain reference teaches all of Applicant's claimed compositional and positional limitations, it is inherent that the reference article function in the same manner claimed by Applicant. The burden is upon Applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

10. Yau and Landry-Coltrain are analogous art because they are from the same field of endeavor that is the ink jet recording art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the base layer of Landry-Coltrain with the invention of Yau in order to absorb the solvent from the ink ([0068] of Landry-Coltrain).

Claim Rejections - 35 USC § 103

11. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yau et al. (US 2004/0090512 A1) in view of Tang et al. (US 6,632,485 B1).

12. Yau discloses an ink jet recording element comprising a support having thereon a fusible, porous, image-receiving layer comprising at least two types of hydrophobic polymer particles having different glass transition temperatures, the first type of hydrophobic polymer particles having a T_g higher than about 60 degree C that is monodisperse and the second type of hydrophobic polymer particles having a T_g lower than about 25 degree C [0014]. The first particles have an average particle size of from about 0.2um to about 2um, and have the claimed particle size distribution ([0031] and [0032]). The weight ratio of the first particles to the second particles is from about 10:1 to about 2.5:1 [0032]. The image receiving layer is coated in an amount of 10-60g/m², and has a pore volume of about 5 to about 50 ml/m² [0037]. Crosslinking monomer is used in forming the image receiving layer [0027], and the image receiving layer may comprise UV absorbers [0035]. The substrate comprises paper or polymer film [0038]. The ink jet recording element further comprises a base layer [0039]. Yau does not teach that the base layer comprises gelatin and a polyurethane dispersion as recited in the claimed invention.

13. Tang teaches an ink jet receiving medium comprising a base layer and a top layer, wherein the base layer comprises a crosslinked gelatin and a polyurethane dispersion (Table 5). The thickness of the base layer is 10um (col. 8, line 61). With respect to the swelling amount, it is elementary that the mere recitation of newly

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discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. *In re swinehart et al.*, 169 USPQ 226 at 229. Since the Tang reference teaches all of Applicant's claimed compositional and positional limitations, it is inherent that the reference article function in the same manner claimed by Applicant. The burden is upon Applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

14. With respect to the glass transition (T_g) value of the polyurethane dispersion, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the T_g value in order to improve the flexibility of the layer (col. 4, line 47). A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215. To date, this burden has not been sustained. Furthermore, with respect to the particle size of the polyurethane dispersion, one of ordinary skill in the art would have been motivated to adjust the particle size in order to optimize coating durability and absorption property of the layer.

15. Yau and Tang are analogous art because they are from the same field of endeavor that is the ink jet recording medium art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the base layer of

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the Tang with the invention of Yau in order to reduce the curl and to absorb the majority of the ink (col. 6, line 5 of Tang).

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Fri. 8:00AM-4:30PM.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

B.S.
June 8, 2006.


BETELHEM SHEWAREGED
PRIMARY EXAMINER